ABSTRACT OF THE DISCLOSURE

An energy information system and sub-measurement board for use therewith allows an energy information service provider to measure energy usage at a customer location. The sub-measurement board is connected to an energy distribution panel located at the customer location and measures energy usage of individual circuits of the distribution panel. The sub-measurement board outputs a load profile of the energy usage and transmits the load profile to the energy information service provider via a wide area network (WAN). The load profile is processed by the energy service provider and posted on a server for access by the customer. The sub-measurement board is capable of receiving three three-phase voltages and nine single-phase currents. The voltages and currents are input into a microprocessor circuit which compares the currents one at a time to the voltages to match the current with the voltage of the same individual circuit of the distribution panel. The microprocessor uses the matched currents and voltages to calculate the load profile of the individual circuits. A utility meter can be connected to the sub-measurement board and output electric pulses thereto which the sub-measurement board uses to calculate cumulative periodic consumption data of the metered utility.